March 31, 2003

Chief,
USDA, AMS, LS, STDZ Branch
Room 2603-S, Stop 0254
1400 Independence Ave, SW
Washington, DC
20250-0254

RE: Docket number LS-02-02

Thank you for the opportunity to comment on the proposed United State Standards for Livestock and Meat Marketing Claims.

Scope issues:
As stated in the background comments, FSIS' Labeling and Consumer Protection Staff will refer to the standards in this proposal in determining whether to grant labeling approval. The proposed requirements are intended for USDA "Certified or Verified" programs. In practice, these standards may become de facto requirements for **ALL** claims, greatly increasing AMS' involvement and consequently adding costs to the production chain.

IBP has numerous claims within Doc. No. LS-02-02 which are identified below. IBP believes they should be modified to account for the scientific findings that are presently available in the literature.
SPECIFIC CLAIMS ISSUES:

1) Antibiotic Claims
   Statement: All antibiotics are withdrawn at least 30 days beyond the minimum FDA withdrawal period.
   Comment: There is no scientific justification or reasoning for any extension beyond the FDA minimum withdrawal period. The FDA withdrawal period is based on sound science and provides full confidence that the antibiotic is not present.
   Recommendation: Remove the requirement from the document.

2) Breed Claims
   Statement: Claims for breed of livestock must meet criteria established by an AMS-recognized US breed association for the referenced breed. If the breed association does not establish criteria for this claim, animals must be traceable to a parent registered with a breed association.
   Comment: Carcass quality specifications do not denote breed.
   Recommendation: Claims for breed of livestock must meet the phenotypic criteria established by the respective US breed association.

3) Grain Fed Claims

Statement: Minimum of 100 days on feed for steers and heifers
Comment: Some cattle do not require 100 days of feed to meet the desired yield and quality grade. There are a lot of factors such as genetics, sex, and nutrition that dictate the needed number of days on feed. There are studies that show feeding as few as 28 days will significantly improve tenderness shear values. Additionally, there are studies that report feeding for as few as 49 days will achieve optimum eating quality.
Recommendation: Reduce the number of days from 100 to 75.

4) Preconditioning Claims
Statement: At least 45 days prior to their sale/shipment
Comment: There is no scientific basis for requiring a 45 day minimum of treatments prior to sale or shipment. "The Iowa Veterinary Medical Association, in cooperation with the Iowa Cattlemen's Association, initiated and has continually updated the Iowa Preconditioning Calf Program. The program has withstood the test of time and is the gold standard for such programs." This was quoted from the Iowa Veterinary Medical Association website.
Recommendation: Reduce to 30 days to match the currently defined and industry accepted practice.

5) Vitamin E Claims
Statement: Minimum of 50,000 IU/head during feeding period (±15% tolerance)
Comment: It has been documented in scientific literature that concentrations as low as 500 IU's for extended periods (>100 days) will achieve the needed musculature concentrations needed to extend product color life. Most of the literature is based on much lower concentrations than 50,000 IU's. The combination of time on feed and vitamin E concentration are both integral parts of a vitamin E feeding program which must be addressed in the regulation.
Statement: Minimum 30 day feeding period
Comment: There has been work done looking at high concentrations for short periods of time to achieve the needed musculature concentrations.
Statement: Minimum 3.2 micrograms of alpha-tocopheryl acetate concentration in the neck muscle (Rectus capiti dorsalis major) / gram of muscle tissue
Comment: The concentration is in the correct range for achieving extended product color life, however, it is not necessary to sample out of the Rectus capiti dorsalis major muscle. There has been a lot of research looking at concentrations in various muscles including the Longissimus and Gluteus medius. There is also literature evaluating the concentrations in blood and subcutaneous fat.
Recommendation: Change the proposal to require a validated program of time on feed and vitamin E concentration to achieve an intramuscular concentration of 3.2 microgram of alpha-tocopheryl acetate. As long as the required concentration of alpha-tocopheryl acetate is achieved in a validated program, regardless of how length of time or concentration, the benefits on product quality will be achieved.

6) Aged Meat Claims
Statement: Must be wet aged for a minimum of 21 days or dry aged for a minimum of 35 days.

Comment: The majority of research reports show that wet aging is completed in most muscles by 14 days postmortem. There is very little literature or data on dry aging, therefore, establishment of a specific day (i.e. 35) would be very subjective. Additionally, the majority of the beef industry wet ages red meat.
Recommendation: Create one requirement for the minimum wet aging period to be 14 days post mortem.

7) Electrically Stimulated
Statements:
- The cross product of the voltage and amperage must be ≥500
- Consist of at least 3 cycles with a minimum pulse of ≥1.5 seconds "on" and ≥1.0 second "off".

Comment: There is absolutely no scientific basis for this requirement as written. There are two main reasons for using electrical stimulation: 1) increase the rate of pH decline, and 2) improve tenderness postmortem. It is probably safe to say that there has been as much research (domestically and internationally) in this area and as any other area in meat science. Much of this research will state that electrical stimulation works by preventing cold shortening, structurally damaging the myofibril structure, and providing and ideal environment for lysosomal enzyme release. It has been well documented that both high and low voltage electrical stimulation successfully achieve these requirements.
Recommendation: We suggest removing the cross product calculation from the requirements because there is no scientific basis for this calculation. Also, change part two to a minimum of 7.5 total seconds (the sum of the cycles described) versus three cycles of 1.5 "on" and 1.0 "off".

8) Tenderness Claims
Statements:
- "A tenderness management system must include at least 3 of the following controlled elements and must be statistically verified (P≤.05) to meet an objective tenderness evaluation of a WBS score of ≤4.0 kg"
- The objective tenderness evaluation must be revalidated on an annual basis.

Comments: There is no basis for needing a minimum of three elements to a "tenderness" program. The basis for any of the elements listed in the proposed document is to insure that a product labeled as tender meets the customers expectation. This does not require that a minimum number of processes be used, but that the sum of all the processes is tender. i.e. regardless if one or four different processes in combination are used, if the end product is "tender", then it should be able to be labeled at "tender". Furthermore, product which is naturally tender, without any interventions, should be permitted to use a "tender" claim. A tenderness claim should be based on a measurement of tenderness. There is a different tenderness expectation between customers that purchase different types of steaks, for instance a strip versus round steak. Therefore, maximum permissible shear force scores should vary among various cuts of beef.
Recommendations: To meet a tenderness claim, the program must validate tenderness based on WBS values evaluated following the AMSA guidelines. Additionally, in cases were tenderness enhancements have been used, the requirement to revalidate should be removed. If

a process has been validated to show the improvement in tenderness, it should be considered "approved" for this use, unless something in the process has significantly changed.

Sincerely,

Charlie Mostek
Senior Vice President of Fresh Meat Sales and Marketing